



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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Ref: 8W-WW

Erin Scott, Permits Unit Manager  
Water Quality Control Division  
Colorado Department of Public Health and Environment  
4300 Cherry Creek Drive South  
Denver, CO 80246

Subject: EPA Comments on the Coalbed Methane Permits in Public Notice

Dear Ms. Scott:

The purpose of this letter is to provide U.S. EPA Region 8's comments on the Coalbed Methane Permits (CBM) permit issued to XTO Energy Inc. (CO-0048054 and CO-0048062) and Pioneer Natural Resources USA Inc. (CO-0047767, CO-0047776, and CO-0048003). EPA evaluated the documents provided in the February 6, 2015 public notice and is providing comments regarding the applicability of 40 CFR 435 Subpart E requirements in the draft permit and CDPHE's response to the permittee's requests for EC/SAR compliance schedules and for instream WET compliance monitoring.

**Use of 40 CFR Part 435 Subpart E Requirements**

The Oil and Gas Point Source Category found in 40 CFR Part 435 establish the following requirements for oil and gas activities for on-shore activities: "...there shall be no discharge of waste water pollutants into navigable waters from any source associated with production, field exploration, drilling, well completion, or well treatment (*i.e.*, produced water, drilling muds, drill cuttings, and produced sand)". However, Subpart E of the category provides an exception for onshore facilities located in the continental United States and west of the 98th meridian: discharge to navigable waters is allowed "...for which the produced water has a use in agriculture or wildlife propagation when discharged into navigable waters."

The term "use in agricultural and wildlife propagation" is defined as produced water of good enough quality to be used for wildlife or livestock watering or other agricultural uses and the produced water is actually put to such use during periods of discharge. Specifically, while EPA recognizes that 40 CFR Part 435 does not currently apply to CBM discharges, the State has used its BPJ authority in its State Rules to apply the requirements of Subpart E in the draft permits. The WQA for these draft permits states that the produced water "will be put to beneficial use for wildlife which are known to be present in the area and for agricultural purposes. Therefore the beneficial use provision of the ELG is implemented in this permit."

For the draft permits CO-0048062, CO-0048003, CO-0047776, and CO-0047767, the justification for how the produced water will be used for agricultural and wildlife propagation does not meet the minimum requirement in

40 CFR Part 435 Subpart E. The fact sheets for the draft permits fails to explain how the produced water is of good enough quality to be used for wildlife or agricultural purpose (e.g. complies with State WQS, is based upon literature/studies to establish limitations which are protective of livestock and wildlife consumption, etc.) and that the water is actually put to such use during periods of discharge (e.g. beneficial uses documentation, written letters from the users such as ranchers or State Game/Wildlife Department, etc.). EPA requests that the State include additional information in the final permits to comply with the minimum requirements in 40 CFR Part 435 Subpart E.

### **Division Response to the Permittee's Request for EC/SAR Compliance Schedules and WET Instream Compliance Monitoring**

#### *EC/SAR Compliance Schedules—*

The permittees requested a modification of EC/SAR permit limits that became effective on April 1, 2014 to allow time to gather additional data to support the revised limits and additional time to assess how to comply with EC and SAR limits. The request included a compliance schedule for EC/SAR with the following milestones:

1. For a 24-month period, SAR and EC will be tested monthly at each outfall and will report the monthly average on DMRs as "report only";
2. After 12 months, the results of SAR and EC sampling/testing will be reported to the Division, noting any seasonal and field variabilities; and
3. After 24 months the SAR and EC results will be reported to the Division and recommended steps for SAR and EC compliance and a schedule for compliance will be provided.

The Division denied the request and responded that the SAR and EC permit limits became effective in the 2010 permits with a compliance schedule because the Division recognized the permittee's would not be able to meet these 2010 established permit limits. In addition, the Division issued modifications to the EC/SAR limits (effective April 1, 2014) to the maximum effluent concentrations and included flow limits at the outfalls to ensure the current conditions were retained.

EPA evaluated the Division's response to the permittee's request for a compliance schedule for EC/SAR and agrees with the Division's determinations in establishing the permit conditions and EC and SAR limits because they are consistent with EPA's NPDES permitting rules. In addition, compliance schedules cannot be established in a permit for technology-based effluent limits because the statutory deadlines for meeting technology standards have passed. This restriction applies to both existing and new dischargers.

#### *WET Instream Compliance Monitoring—*

The permittees requested a modification of the chronic WET monitoring at each outfall to allow for alternative approaches to determine compliance. Specifically, the permittees requested that the chronic WET limits be replaced with acute WET limits because they are protective of chronic WET objectives for the Purgatorie River. In addition, the permittees requested instream compliance monitoring prior to the confluence of the Purgatorie River. EPA evaluated the Division's denial of the permittee's request for modification of the chronic WET limits and supports the Division in its determination to apply chronic WET limits at each outfall because reasonable potential has been demonstrated for those outfalls in permits that previously had chronic WET limits

as required in 40 CFR 122.44(d)(1)(iv), and because this determination is consistent with the Division's WET policy and EPA's NPDES permitting rules.

In addition, the Division established compliance schedules for chronic WET at some outfalls in the CBM permits. These compliance schedules were established to either extend a compliance schedule associated with chronic WET limits in previous permits (CO-0048054; XTO Energy—Lorencito Canyon and CO-0047776; Pioneer-Lorencito Canyon) or are as result of the establishment of new permit limits because the Division evaluated the instream waste concentration IWC in the downstream receiving waters (CO-0047767; Pioneer-East Spanish Peaks, CO-0048003; West Spanish Peaks, CO-0048062; and XTO Energy-Apache Canyon).

40 CFR Part 122.47(a)(1) of the NPDES regulations and as established in the May 10, 2007 Jim Hanlon Memorandum states "any schedules of compliance under this section shall require compliance *as soon as possible*..." Based on the evaluation of these fact sheets, it appears that these permits have previously had chronic WET limits with an associated compliance schedule to determine the toxicants and come into compliance. It is not clear whether the extension of the compliance schedules for these permits represent the requirement of "compliance as soon as possible". The Division should provide adequate justification to warrant the extension of these compliance schedules. However, EPA agrees that a compliance schedule is warranted for those outfalls in the CBM permits with newly established chronic WET limits as a result of the Division's evaluation of the instream waste concentration.

## CONCLUSION

EPA Region 8 appreciates the opportunity to provide comments on the above referenced permit during the public notice period. If there are questions concerning our comments, please contact Al Garcia at (303) 312-6382.

Sincerely,



Colleen R.L. Rathbone  
Chief, Wastewater Unit  
Office of Partnerships and Regulatory Assistance

cc: Janet Kieler, Permits Section Manager, CDPHE

